

# Four More Things Clinicians and Patients Should Consider

## **1 Don't obtain screening laboratory tests in the medical clearance process of paediatric patients who require inpatient psychiatric admission unless clinically indicated.**

Paediatric mental health presentations to the emergency department (ED) have increased since 2000, mirroring the increased incidence of population-level paediatric mental health issues. Most paediatric patients do not have underlying medical concerns contributing to their ED presentations for acute mental health concerns. While medical clearance has historically been linked with laboratory evaluation, evidence shows that routine laboratory testing is not necessary or useful to provide safe mental health care to paediatric patients presenting to the ED. Eliminating unnecessary routine screening laboratory tests to medically clear paediatric patients will prevent iatrogenic procedure-related distress, decrease tasks for healthcare providers to complete in the already busy emergency setting and decrease healthcare costs for tests with no value.

## **2 Don't routinely hospitalize otherwise healthy children who are post-op from a non-perforated laparoscopic appendectomy who can be safely and more comfortably managed at home.**

Non-perforated appendicitis is a common paediatric disease generally managed with a laparoscopic appendectomy. Children are usually safe to be discharged home post-operatively after a brief period of observation, yet they often remain unnecessarily hospitalized for another 1-2 days despite tolerating regular diets and only requiring oral pain medications. Since patients are often more comfortable recovering at home, this practice is not patient-centred and also increases the risk of hospital-acquired infections and other conditions. Additionally, it leads to added costs and negatively impacts healthcare resource utilization. Evidence supports that patients with non-perforated appendicitis can be safely discharged home within a short period after their operation if adequate counselling and follow-up plans are provided.

## **3 Don't keep urinary catheters in place longer than clinically indicated in hospitalized children.**

Prolonged use of urinary catheters longer than medically indicated increases the risk of bacterial colonization, leading to catheter-associated urinary tract infections (CAUTIs), a common and potentially serious healthcare-associated infection that can lead to severe complications, such as bloodstream infections, sepsis, and kidney damage. In addition to the patient health risks, CAUTIs are associated with increased healthcare costs, prolonged hospital stays, and a higher likelihood of antibiotic resistance due to the need for antibiotic treatments.

By implementing evidence-based guidelines for CAUTI prevention by the Children's Hospitals' Solutions for Patient Safety, healthcare providers can minimize these risks and improve patient outcomes. Furthermore, reducing the duration of catheter use can also enhance patient comfort and dignity, as urinary catheters can be physically uncomfortable and restrict mobility. This can negatively impact patients' overall well-being and prolong their recovery process. Thus, removing urinary catheters as soon as medically indicated not only prevents the likelihood of developing a CAUTI but also reduces the potential consequences of increased healthcare costs while promoting improved patient care experience by prioritizing patients' comfort and quality of life.

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## **4 Don't routinely order vitamin D levels in otherwise healthy children. Vitamin D testing is only indicated for children at risk for osteoporosis, rickets, malabsorption syndromes, renal disease and medications affecting vitamin D metabolism. Repeat testing is not indicated within 3 months or less for a patient with previously low results or within 6 months if previously normal.**

Many children in Canada have low vitamin D levels. However, few have symptomatic or severe vitamin D deficiency. Current guidelines do not call for population-based screening in otherwise healthy children as following recommended age-based Dietary Reference Intakes (DRIs) for vitamin D and calcium and increasing safe sun exposure is sufficient. Measurement of 25-OH vitamin D levels does not alter medical management in otherwise healthy children, is expensive, and requires an uncomfortable venipuncture. 25-OH vitamin D testing should only be considered in higher-risk patients such as those at risk for osteoporosis, or those with clinical signs of rickets, malabsorption syndromes, renal disease and/or patients on medications affecting vitamin D metabolism where results will influence treatment decisions.

For higher-risk patients where 25-OH vitamin D testing is indicated, repeat testing is not necessary on a frequent basis.

- Where baseline 25-OH vitamin D level is low, repeat testing should not be completed until after 3-6 months on the recommended vitamin D3 dose.
- Where baseline 25-OH vitamin D level is normal and there is no change to vitamin D intake, repeat testing is not indicated until 6-12 months. Note: This does not apply to children who have IM ergocalciferol treatment who may require peak and trough measurements.

### **How the list was made**

The Hospital for Sick Children (SickKids) in Toronto, Canada established its fourth list of Choosing Wisely recommendations in 2023 through the following process. A diverse group of SickKids stakeholders including representatives from Diagnostic Imaging, Laboratory Medicine, Pharmacy, Paediatrics, Surgery & Perioperative Services as well as the Hospital's Utilization Management and Antimicrobial Stewardship Committees were encouraged to submit recommendations applicable to a tertiary/quaternary care paediatric hospital and demonstrating evidence of overuse. In an iterative process, all proposed recommendations were reviewed by the Choosing Wisely steering committee to determine their appropriateness for inclusion in the new list. Factors considered included evidence of overuse/misuse, implementation and measurement plan, and presence of a clinician champion to lead the project. With a total of 19 recommendations developed to date, the Hospital continues to review applications for new Choosing Wisely recommendations from stakeholders across a variety of Divisions and Departments.

### **Sources**

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